- $p(A/B) = \frac{p(A \cap B)}{p(B)} = \frac{\frac{4}{35}}{\frac{20}{35}} = \frac{1}{5}$

- $p(\bar{B}/A) = 1 - p(B/A)$
$= 1 - \frac{p(A \cap B)}{p(A)}$
$= 1 - \frac{\frac{4}{35}}{\frac{1}{7}} = \frac{1}{5}$

- $p(A/\bar{B}) = \frac{p(A \cap \bar{B})}{p(\bar{B})}$
$= \frac{p(A) - p(A \cap B)}{1 - p(B)} = \frac{\frac{1}{7} - \frac{4}{35}}{1 - \frac{20}{35}} = \frac{1}{15}$

2) $p(D/F) = \frac{C_3^1 \times C_4^1}{C_7^2} = \frac{12}{21}$

$p(D/\bar{F}) = \frac{4^1 \times 1^1}{5^2} \times 2 = \frac{8}{25}$

- $p(D) = p(D \cap F) + p(D \cap \bar{F})$
$= p(D/F) \cdot p(F) + p(D/\bar{F}) \cdot p(\bar{F})$
$= \frac{12}{21} \times \frac{1}{3} + \frac{8}{25} \times \frac{2}{3} = \frac{212}{525}$

Qarray.tn -Aqra Blech-